

# [HYDRODYNAMIC BEARING, SPINDLE MOTOR USING THE SAME AND DISC DRIVE APPARATUS PROVIDED WITH SPINDLE MOTOR]

## Abstract

The present invention relates to a hydrodynamic bearing supporting a shaft and a sleeve so as to relatively rotate with respect to a rotation axis. In accordance with one example of the present invention, there is provided a hydrodynamic bearing in which a capillary seal portion is formed continuously in a bearing portion having a lubricating oil retained in a micro gap as a working fluid. The capillary seal portion is provided with a first capillary seal portion having a first radial gap, a dimension of the first radial gap being getting at least wider in accordance with increasing a distance from the bearing portion in the rotation axis, and a second capillary seal portion adjoining the first capillary seal portion and having a second radial gap, a dimension of the second radial gap being getting at least wider in accordance with increasing a distance from the bearing portion in the rotation axis. The second

capillary seal portion is expanded progressively in accordance with getting toward an outer side in an axial direction.